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July 24, 2002

CERTIFICATE OF MAILING  
37 C.F.R 1.8

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Date

Steven L. Highlander

Commissioner for Patents  
Washington, DC 20231

Re: U.S. Patent Application No. 10/043,877 entitled "ANTIHELMINTHIC DRUGS AS A TREATMENT FOR HYPERPROLIFERATIVE DISEASES" by Tapas Mukhopadhyay et al.

Our Reference: INRP:095US

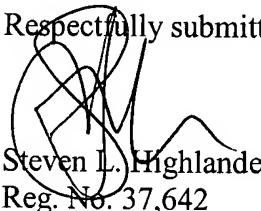
Client Reference: MDA99-067

Sir:

Enclosed for filing in the above-referenced patent application is an Information Disclosure Statement, Form PTO-1449, and references (B1-B2, C1-C18).

No fees are believed to be due in connection with the filing of this Information Disclosure Statement, however, should any fees under 37 C.F.R. §§ 1.16 to 1.21 be deemed necessary for any reason relating to the enclosed materials, the Commissioner is hereby authorized to deduct said fees from Fulbright & Jaworski Deposit Account No.: 50-1212/INRP:095US.

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Respectfully submitted,  
  
Steven L. Highlander  
Reg. No. 37,642

SLH/cmb  
Encl.: as noted  
25189570.1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Tapas Mukhopadhyay *et al.*

Serial No.: 10/043,877

Filed: January 9, 2002

For: ANTIHELMINTHIC DRUGS AS A  
TREATMENT FOR  
HYPERPROLIFERATIVE DISEASES



Group Art Unit: 1641

Examiner: Unknown

Atty. Dkt. No.: INRP:095US

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Steven L. Highlander

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents  
Washington, D.C. 20231

Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56, it is respectfully requested that this Information Disclosure Statement be entered and the documents listed on attached Form PTO-1449 be considered by the Examiner and made of record. Copies of the listed documents required by 37 C.F.R. § 1.98(a)(2) are enclosed for the convenience of the Examiner.

In accordance with 37 C.F.R. §§ 1.97(g), (h), this Information Disclosure Statement is not to be construed as a representation that a search has been made, and is not to be construed to be an admission that the information cited is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

The present Information Disclosure Statement is being filed prior to the receipt of a first Official Action reflecting an examination on the merits, and hence is believed to be timely filed in accordance with 37 C.F.R. § 1.97(b). No fees are believed to be due in connection with the filing of this Information Disclosure Statement, however, should any fees under 37 C.F.R. §§ 1.16 to 1.21 be deemed necessary for any reason relating to these materials, the Commissioner is hereby authorized to deduct said fees from Fulbright & Jaworski Deposit Account No.: 50-1212/INRP:095US.

Applicants respectfully request that the listed documents be made of record in the present case.

Respectfully submitted,

Steven L. Highlander  
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Attorney for Applicants

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Date: July 24, 2002

Form PTO-1449 (modified)

Atty. Docket No.

Serial No.

INRP:095US

10/043,877

List of Patents and Publications for Applicant's  
INFORMATION DISCLOSURE STATEMENT  
(Use several sheets if necessary)

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*Tapas Mukhopadhyay et al.*

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## U.S. Patent Documents

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## Foreign Patent Documents

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## Other Art

See Page 1

**U.S. Patent Documents**

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.

**Foreign Patent Documents**

Exam. Init.	Ref. Des.	Document Number	Date	Country	Class	Sub Class	Translation Yes/No
	B1	WO 98/32440	7/30/98	PCT			
	B2	WO 98/51304	11/19/98	PCT			

**Other Art (Including Author, Title, Date Pertinent Pages, Etc.)**

Exam. Init.	Ref. Des.	Citation
	C1	Bossche <i>et al.</i> , <i>Chemotherapy of Gastrointestinal Helminths</i> , Arundel <i>et al.</i> , (eds.), Springer-Verlag, 1985, In: <i>Handbook of Experimental Pharmacology</i> , Vol 77, Born <i>et al.</i> , (eds.).
	C2	Davidse, "Benzimidazole fungicides: mechanism of action and biological impact," <i>Ann. Rev. Phytopathol.</i> , 24:43-65, 1986.
	C3	Friedman and Platzer, "Interaction of anthelmintic benzimidazoles and benzimidazole derivatives with bovine brain tubulin," <i>Biochim. Biophys. Acta</i> , 544:605-614, 1978.
	C4	Friedman and Platzer, "Interaction of anthelmintic benzimidazoles with ascaris suum embryonic tubulin," <i>Biochim. Biophys. Acta</i> , 630:271-278, 1980.
	C5	Gottschall <i>et al.</i> , "The metabolism of benzimidazole anthelmintics," <i>Parasitol. Today</i> , 6:115-124, 1990.
	C6	Kohler and Bachmann, "Intestinal tubulin as possible target for the chemotherapeutic action of mebendazole in parasitic nematodes," <i>Mol. Biochem. Parasitol.</i> , 4:325-336, 1981.
	C7	Lacey and Prichard, "Interactions of benzimidazoles (BZ) with tubulin from BZ-sensitive and BZ-resistant isolates of <i>Haemonchus contortus</i> ," <i>Mol Biochem Parasitol</i> , 19:171-181, 1986.
	C8	Lacey and Watson, "Structure-activity relationships of benzimidazole carbamates as inhibitors of mammalian tubulin, <i>in vitro</i> ," <i>Biochem. Pharmacol.</i> , 34(7):1073-1077, 1985.

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Form PTO-1449 (modified)

Atty. Docket No.  
INRP:095USSerial No.  
10/043,877

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## List of Patents and Publications for Applicant's

Applicant  
Tapas Mukhopadhyay *et al.*

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## INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

Filing Date:  
January 9, 2002Group:  
1641

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## U.S. Patent Documents

See Page 1

## Foreign Patent Documents

See Page 1

Other Art  
See Page 1

## Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
	C9	Lacey and Watson, "Activity of benzimidazole carbamates against L1210 mouse leukaemia cells: correlation with in vitro tubulin polymerization assay," <i>Biochem. Pharmacol.</i> , 34(19):3603-3605, 1985.
	C10	Lacey, "The role of the cytoskeletal protein, tubulin, in the mode of action and mechanism of drug resistance to benzimidazoles," <i>Int. J. Parasitol.</i> , 18:885-936, 1988.
	C11	Lanusse <i>et al.</i> , "Methimazole-mediated modulation of netobimin biotransformation in sheep: a pharmacokinetic assessment," <i>J Vet Pharmacol Ther</i> , 15(3):267-274, 1992
	C12	Lanusse <i>et al.</i> , "Comparative sulphoxidation of albendazole by sheep and cattle liver microsomes and the inhibitory effect of methimazole," <i>Xenobiotica</i> , 23(3):285-295, 1993.
	C13	Lubega, and Prichard, "Specific interaction of benzimidazole anthelmintics with tubulin: high-affinity binding and benzimidazole resistance in Haemonchus contortus," <i>Mol. Biochem. Parasitol.</i> , 38:221-232, 1990.
	C14	Nare <i>et al.</i> , "Benzimidazoles, potent anti-mitotic drugs: substrates for the P-glycoprotein transporter in multidrug-resistant cells," <i>Biochem. Pharmacol.</i> , 48(12):2215-2222, 1994.
	C15	Nare, <i>et al.</i> , "p-azidosalicyl-5-amino-6-phenoxybenzimidazole photolabels the N-terminal 63-103 amino acids of Haemonchus contortus $\beta$ -Tubulin 1," <i>J Biol Chem</i> , 271(15):8575-8581, 1996.
	C16	Pilch <i>et al.</i> "Characterizing the DNA binding modes of a topoisomerase 1-poisoning terbenzimidazole: evidence for both intercalative and minor groove binding properties," <i>Drug Des Discov</i> , 13:115-133, 1996.
	C17	Russell <i>et al.</i> , "Binding of [ <sup>3</sup> H]Benzimidazole carbamates to mammalian brain tubulin and the mechanism of selective toxicity of the benzimidazole anthelmintics," <i>Biochem. Pharmacol.</i> , 43(5):1095-1100, 1992.
	C18	Stearns <i>et al.</i> , "Liarozole and 13-cis-retinoic acid anti-prostatic tumor activity," <i>Cancer Res</i> , 53:3073-3077, 1993.

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